

What's holding up American farmland values?

By **PORTER J. MARTIN** Accredited Land Consultant (ALC), Certified International Property Specialist (CIPS).

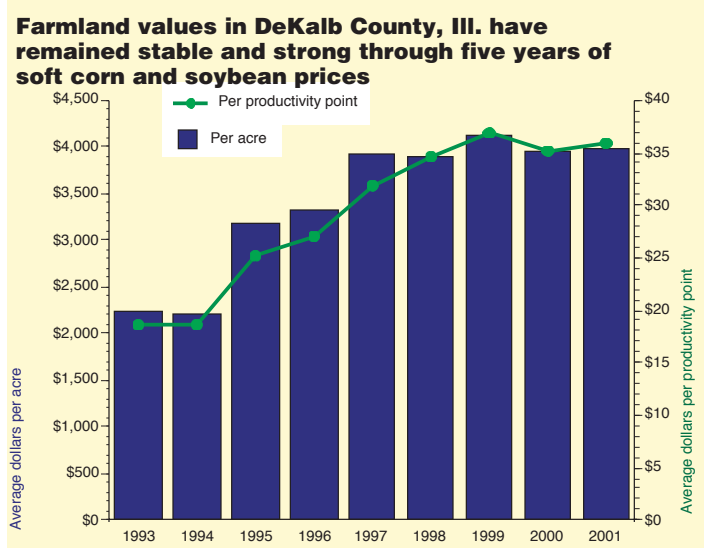
Porter is the first Realtors Land Institute (RLI) member, and the 10th person in the world, to earn the International Real Estate Federation's CIPS credentials. Porter earned RLI's highest honor, the Land Realtor of America award. He's an internationally known speaker and writer on ag real estate. Porter and his family are Illinois farmland owners.

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Wherever I go across the countryside, the question people ask me the most is, "What is keeping farmland prices so strong?"

You can find localities of soft land prices, but the main trend is stable to strong. Then there are occasional "upside" surprises. Our appraiser, Chuck Foster, told me about a north-east Illinois farm that sold in January 2000 for \$2,800, then sold again 23 months later in December 2001 for \$3,350 — almost a 20% increase in less than two years.

Sales of farmland in our home county, DeKalb County, Ill., have remained strong the past five years, as you can see in the chart of sales below.

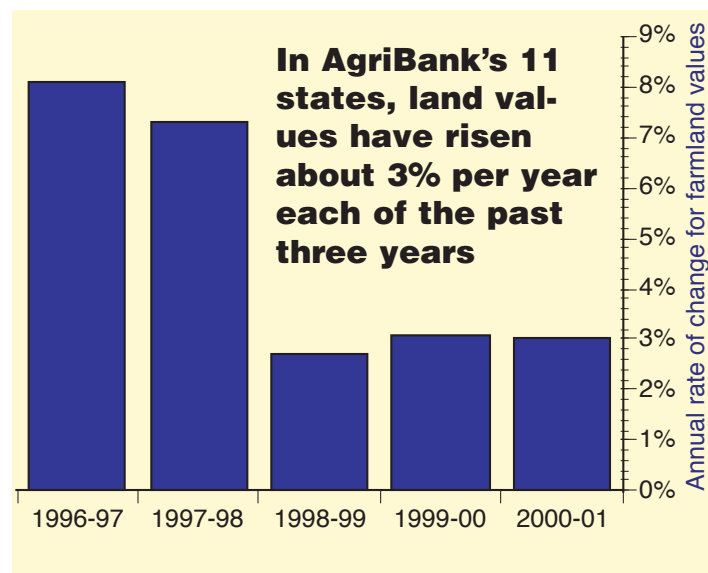


A few days ago, USDA Chief Economist Keith Collins said on USDA radio that farmland's national average value rose another 3% in 2001. That's on top of a 35% increase the previous five years — in spite of weak prices for most of the eight main farm-program crops!

Keith Collins' report was confirmed by data from AgriBank, the Farm Credit Services division covering a 11-state region stretching from North Dakota to Arkansas, including Illinois.

AgriBank's head of appraisals, Ed Dillman, reported that the region has seen about a 3% increase in farmland values in each of the past three years. For the past five years, farmland values have increased more than 25%. Dillman says that the past three years have been essentially stable in real

terms. AgriBank is now in joint management with AgAmerica Farm Credit Bank, which includes the FCS of America association of Iowa, South Dakota, Nebraska and Wyoming. Altogether, these FCS entities monitor land values in some 20 states. Here's the region-wide chart from AgriBank:



The latest update of Farm Credit Services of America benchmark farms in Iowa, Nebraska, South Dakota and Wyoming shows that its Iowa benchmark farms have gained 60.8% in value over the past 10 years.

Strong farmland prices look totally rational when you add up the multiple motives for buying and holding onto land. We're in a dramatically different situation than at the outset of the 1981-87 bust, when farmland values plunged.

First, look at the general scope of the farmland market — it's traditionally a "thin" market. The urge to hold land in the family for generations limits the market supply. At our brokerage firm, we almost always have more buyers than sellers.

USDA found in a 1987 study by Gene Wunderlich that an average farm or ranch changes owners once a generation — about 22 years.

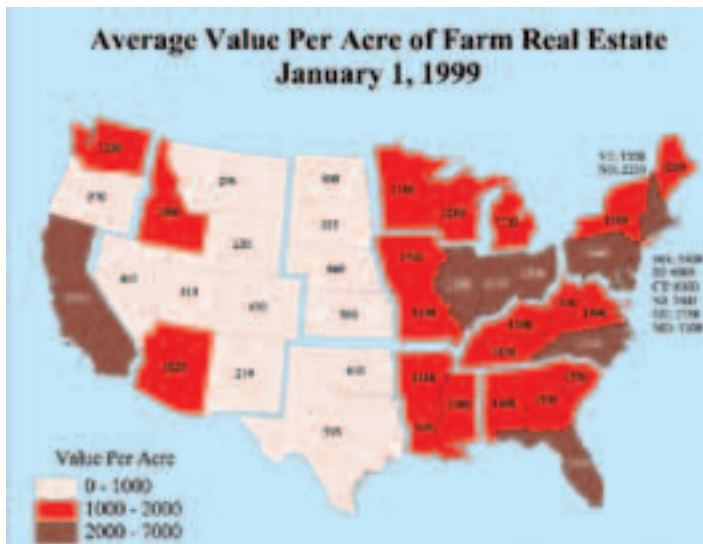
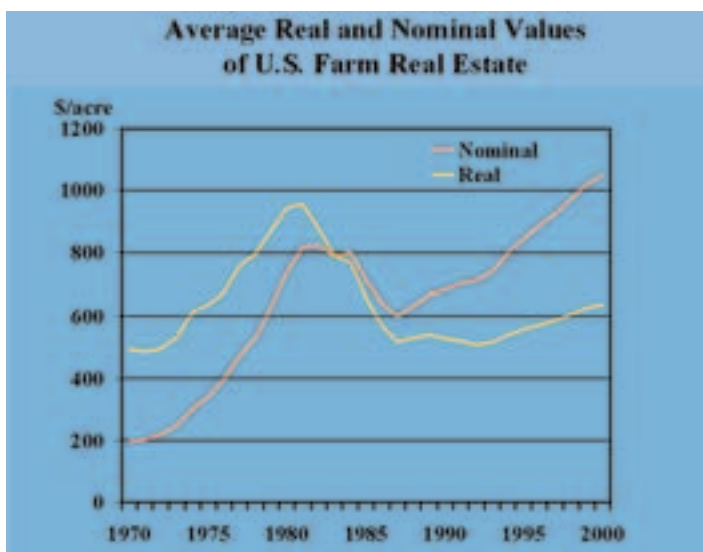
In more than 60% of the title changes, the new owner is an heir or relative, so these farms passing within the family never test the open market. The slow turnover of farms is a

huge contrast with the marketplace for urban houses, where there's almost a 20% annual turnover.

In a typical year, 2% of privately owned U.S. farm real estate changes hands within families, via estate transfers and sales to children or other relatives. Less than 1.5% is sold in arms-length commercial transactions. That's roughly 13 mil. acres of cropland changing hands.

Thus, the U.S. commercial ag real estate market sees open-market cash transactions of only about \$14 bil. annually. That's a thin capital turnover in an industry with \$950 bil. of farm real estate. For perspective, total receipts from sales of farm commodities will be about \$204 bil. in 2002.

Here's an overview of the longer-term trends in U.S. farm real estate, and where we were as of Jan. 1, 1999 on average values by state.

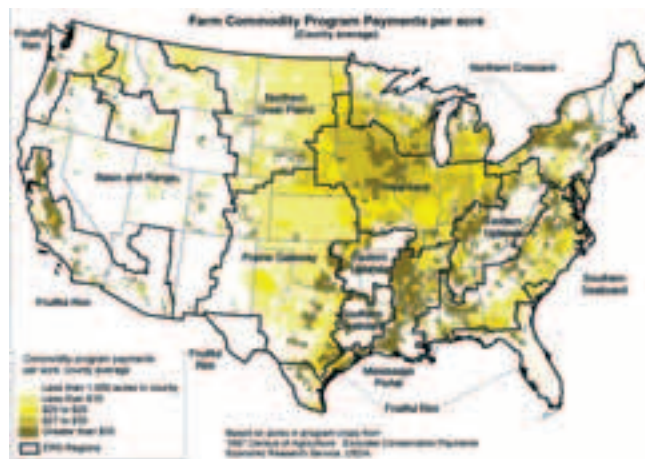


I'll group the forces currently supporting farmland demand into three categories: Government programs, nonfarm demand for rural land, and farmers' buying for expansion acreage.

Government policy encourages stable farmland values

One of your main farmland analysts here at USDA, Charles Barnard, says that federal farm program payments the past several years "have added nearly \$62 bil. to U.S. farmland values."

That report, in your Nov. 2001 Ag Outlook, was authored by Barnard and four USDA colleagues. In 2000, direct government payments to agriculture made up almost 40% of U.S. net cash farm income. Of the \$23 bil. in payments, 92% of the average payment was commodity related under the 1996 Farm Act or supplemental disaster and emergency payments. Only 8% was for conservation programs like the CRP, which taxpayers may see as returning an environmental benefit for their money.



In the Corn Belt, which USDA labels the "Heartland" (map above), the eight main program crops are raised on land with a total market value of \$167.3 billion. About 24% of this value, or \$40.2 bil., derives from the income benefits of program payments, estimate the ERS analysts.

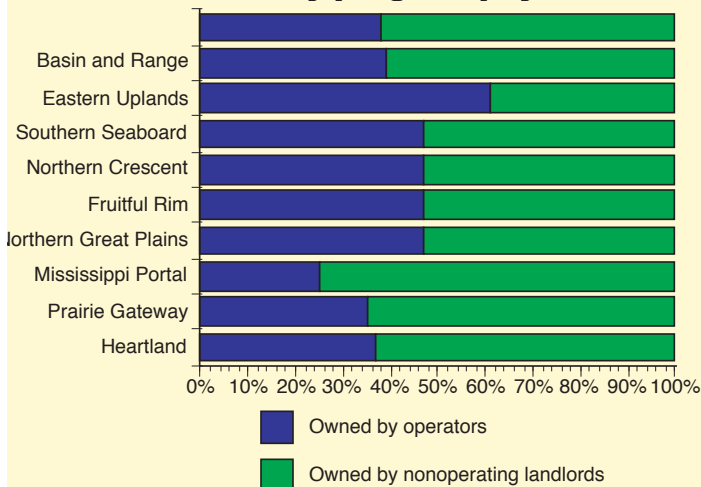
In the Plains, shown as the Northern Great Plains and Prairie Gateway on the map, 22% to 23% of current land values rests on program payments. Without those programs, about \$12 bil. would drop from land values in the Plains!

Farm program impacts on land values are more pronounced within some states. Omaha-based Farm Credit Services of America says that its "benchmark" farms in South Dakota appreciated almost 32% in the past four years. That's three times faster than Iowa or Nebraska. Ask any eastern South Dakota farmer about the appeal of the \$5.26 national soybean loan rate under the 1996 Farm Act! It's part of the reason South Dakotans have increased soybean acreage 72% since the 1996 Farm Act went into effect. The program has enhanced South Dakota's returns to land with an extra \$200 mil. per year worth of soybeans — and therefore also spurred land values.

Charles Barnard and his fellow analysts here at the Economic Research Service remind us that capitalizing farm programs into land prices creates a level of land values dependent on continuing injections of federal cash.

Further, operating farmers actually see their land costs rise as farmland program payments stimulate rental competition

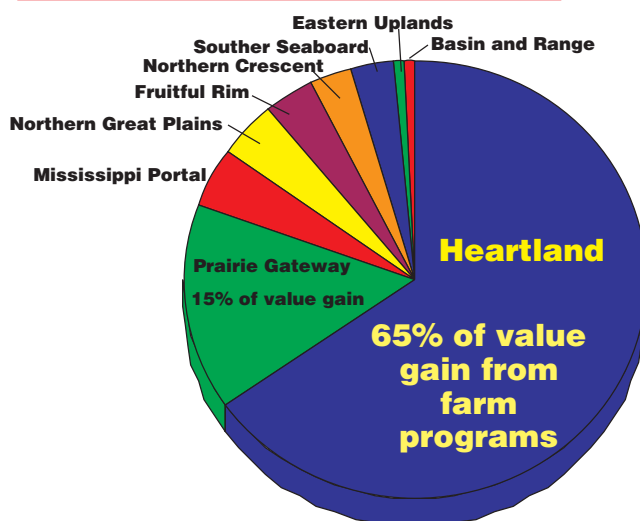
Nationwide, 62% of farmland is owned by non-operating landlords, whose land values are enhanced about \$38 bil. by program payments



and become capitalized into farmland values. Nationally, about 62% of the cropland in the major program crops is owned by non-operating landowners. They benefit more from higher land values than operators do, for operators own just 38% of the cropland in the program crops. The chart above shows the regional breakout, as reported by the ERS report in the November 2001 *Agricultural Outlook* by Barnard and others.

Another way of visualizing how farm programs impact our Midwest land is to look at the pie chart below showing that the "land price enhancement" impact flows mainly to the Heartland and Plains:

Cropland values in Corn Belt and Plains get 70% of farm program's land price enhancement



Of course we can hope prices of the eight major program crops revive and replace government payments with marketing profits. But the 10-year House farm bill doesn't anticipate an early weaning from federal farm supports.

In fact, the current farm program debate has advanced a new concept for farm programs that would give such transfer

payments almost institutional status: Paying farmers for conservation and environmental benefits like the European Union does.

Senate Ag Chairman Tom Harkin (D-Iowa) may not get the billions of dollars he wants for his Conservation Security Act. However, conservation funding will rise substantially in the next farm bill. The Conservation Reserve Program cap will expand to about 40 mil. acres under either the House or Senate version of the bill. Uncle Sam is already America's largest farm cash-rent tenant, paying an average of \$46.75 per acre rent on 560,249 CRP contracts totaling 33.7 mil. acres in 2002.

That's a cash flow of \$1.576 bil. annually on cropland that has, by definition, marginal productive value.

How much does the CRP influence farmland values? Think about how many of those 33.7 mil. CRP acres would be dumped onto the market if CRP rental wasn't available!

In many counties, the CRP rents a fourth of the farmland — the statutory limit. If this year's CRP rental income was all spent to buy farmland, it would absorb more than 10% of U.S. farm and ranch land brought to market in a typical year.

On top of the regular CRP, several states, including our Illinois state government, cooperate with USDA to offer farmers the Conservation Reserve Enhancement Program (CREP). In my state, CREP currently pays Illinois landowners an average rental rate of \$160 per acre on 94,000 acres of environmentally sensitive land. The program can expand to 132,000 acres, most of it along important waterways like the Illinois River.

Total rental payments on Illinois land now enrolled in CREP will average almost \$1,800 per acre over the 10- to 15-year life of the contracts.

CREP can offer landowners 130% of local cash rental rates. Nationally, CREP has already enrolled 280,000 acres. From a farmland broker's viewpoint, I'd say that the nearly \$1.6 bil. spent yearly on the Conservation Reserve Program definitely helps stabilize and enhance farm and ranch land values in areas where it's active. The CRP has strong support in current legislation. More than a decade ago, USDA analysts projected that the CRP would yield public environmental benefits worth five or six times its annual cost.

Capital gain tax rules encourage re-investing land profit back into land. In my home territory around DeKalb County, Ill., three-fourths of our farmland sales are to Section 1031 exchange buyers. These farmers are replacing highly appreciated farmland sold either to developers — or to public entities which are trying to preserve land against development! They have a huge incentive to defer taxes with a like-kind exchange.

Suppose you sell a highly appreciated farm for a capital gain of \$10,000 per acre. Out of each \$1 in gain, you could choose to pay 40¢ in federal and state capital gain taxes, then invest your remaining 60¢ in CDs at 2.6%. Your net annual return would be about 1.6%. Annual income taxes would pare your after-tax rate of return to less than 1% per year.

So you'd probably choose to acquire replacement farmland in a like-kind exchange, even if cash rental returns are only 3% or 4% of the purchase price. Jeff Waddell, who handles real estate sales in our firm, works with exchange buyers every day. They can make offers with a 30% to 40% buying power advantage over competitors who must pay for land with net income after federal and state income taxes.

Even so, we often see the adjoining farmer defending his turf, outbidding the exchange buyer for the farm he always wanted.

The bottom-line impact of the tax-deferred exchange law is this: Money flowing into land for development and preservation spills out across the entire farming landscape in the form of demand for replacement land. Usually, the exchange buyer wants land a little farther out in the path of progress, so the next generation can experience the same kind of appreciation.

But the demand for replacement land has no boundaries. A farm sold near Minneapolis can trigger five farm purchases in southern Iowa. In fact, brokers in southern Iowa are seeing exchange buyers coming in from all over the country for what they see as cheap land loaded with pheasants and deer.

The need for exchanges, and the advent of farm listings on the Internet, is broadening the farmland market from a neighborhood to a national marketplace. It's also an international marketplace. We manage and market farms for many overseas clients.

I haven't found hard data on the volume of exchange dollars pouring into farmland, so I'll construct a reasonable projection.

The American Farmland Trust, whose research office is a few blocks from our office in DeKalb, Ill., says that every year, urban growth converts "an area of productive farmland the size of Delaware." That would be 1.3 mil. acres. An ERS study (AER-803) says developed land is expanding by 1.8 mil. acres per year. Let's be conservative and presume the average rural acre converted to nonfarm use sells for only \$4,000. Times 1.3 mil. acres, that would generate \$5.2 bil. of land transactions per year. This is consistent with my guesstimate that farmland preservation/conservation demand, added to nonfarm residential, commercial and recreational land, total about \$5 bil. of the \$14 bil. annual market for land.

By any measure, exchanging highly appreciated farmland into replacement farmland generates such a substantial flow of land-buying cash that any slowdown in urban land demand would have a major impact on farmland values.

Also, we sometimes see owners of nonfarm commercial real estate exchange their buildings for farmland. For example, an owner who recently sold an apartment building for a substantial gain wants to exchange into about \$300,000 worth of farmland.

Local and state open-land "preservation" pumps billions into farmland buying competition.

In Kane County, which lies between our DeKalb County and Chicago, the Kane County Forest Preserve District is paying up to \$16,000 per acre for farmland. The Preserve

converts this farmland to timber and trails. Kane county passed a \$70 mil. referendum in 1999 to expand its forest preserve.

This is typical of hundreds of local and state referenda in which urbanites are buying up billions of dollars worth of working land and development-rights easements.

My son-in-law, Glen Chown, is Executive Director of the Grand Traverse County (Michigan) Regional Land Conservancy, which is paying an average \$4,000 per acre to acquire development rights on land in this rapidly developing area. His organization has spent about \$20 mil. for easements on 5,000 acres. The money comes about equally from local initiatives, state and government funds, and private foundations. The value of local land for farming is about \$2,500 per acre. What do you suppose a farmer does if he sells a development easement for \$4,000 an acre? He probably looks for a like-kind exchange into more farmland!

In my own state of Illinois, Gov. George Ryan announced Jan. 24 that his \$200 mil. "Open Land Trust Initiative" has acquired 42,219 acres of open land for natural resource protection.

Two "umbrella" associations of such preservationist groups are The Land Trust Alliance and the Trust for Public Land. They report that since 1998, Americans have passed 529 local and state ballot initiatives, voting to tax themselves almost \$20 bil. to preserve open rural space.

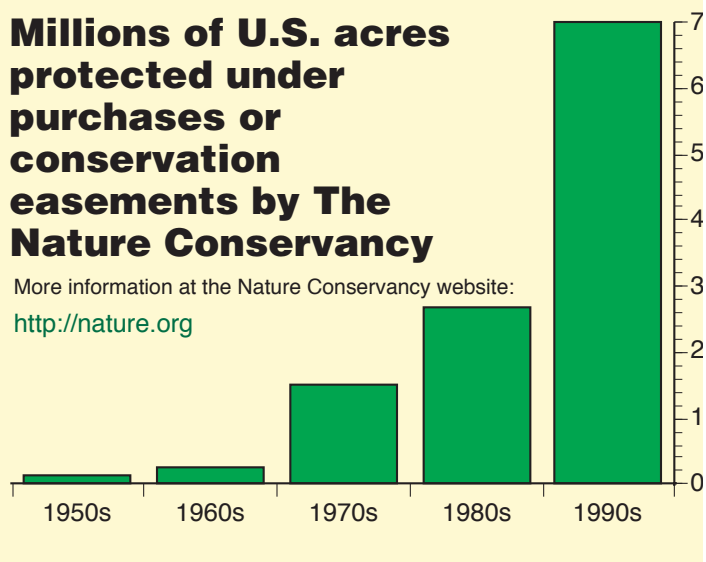
Last year alone, 137 ballot measures around the country approved \$1.7 bil. in new funding to purchase land and easements for parks, greenways and other "viewsapes." That voluntary funding exceeds this year's total cash paid for CRP rentals.

Earlier — in the 2000 presidential election — some 300 local and state ballot initiatives voted more than \$8 bil. for acquisition of land and development rights.

Millions of U.S. acres protected under purchases or conservation easements by The Nature Conservancy

More information at the Nature Conservancy website:

<http://nature.org>



America's largest land preservation organization, The Nature Conservancy (TNC), has protected more than 12.6 mil. acres in 1,400 preserves. (See chart above.) In addition to the \$1.3 bil. worth of land owned by TNC, it has purchased

and resold much more land in cooperation with government acquisitions. The latest TNC land deal is an agreement to buy the 97,000-acre Baca Ranch in the San Luis Valley of Colorado, for \$31.28 million.

The Nature Conservancy has raised \$885 mil. of a projected \$1 bil. in a major "Campaign for Conservation," the largest private conservation campaign ever undertaken.

Meanwhile, groups like Ducks Unlimited and Pheasants Forever continue their legacies of converting farmland to habitat.

Ducks Unlimited (DU) has protected 160,000 acres with conservation easements — most of it farm and ranch land. In its 65 years, DU has raised \$1.5 bil. for wetlands restoration and conversion of farmland to waterfowl habitat.

Pheasants Forever has spent more than \$10 mil. to buy 65,000 acres for 600 permanent habitat sites.

Land purchased by these groups typically drops off the land market permanently.

When the preservation groups or government agencies buy conservation easements, this restricts the supply of local development land. In effect, that buying power enhances the value of neighboring land still available for development.

U.S. Senators and Representatives have been quick to see that land "preservation" is politically popular. They're trying to expand federal land buying by \$1 bil. or so a year. Our former Illinois Senator, Everett Dirksen, used to say: "A billion here; a billion there; pretty soon it adds up."

In the 1800s land rushes, U.S. lawmakers had the goal of getting the federal government's land into productive private use. Today's land rush is the frenzy to take back a lot of private land for government ownership. If federal regulators can't control it with the Endangered Species Act or some other regulatory mechanism, they might even pay some cash to buy it!

The Senate's latest version of the Conservation and Reinvestment Act, S. 990, would pump \$3 bil. into land acquisition for "conservation" over five years. An even larger CARA bill is alive and well in the House of Representatives. It would authorize roughly \$1 bil. annually to buy land and conservation easements. Essentially, the government would use oil lease money to buy back private land for public preservation.

An ERS study (AER-803) estimates Americans would be "willing to pay \$1.4 bil. to \$26.6 bil. per year to conserve rural lands."

The data I can find indicates that land trusts and other preservationist groups are already injecting at least \$2 bil. per year into the U.S. marketplace for rural land. What if the preservation buyers push their spending toward that \$26.6 bil. level which ERS sees as a real potential? That would make "preservation" buyers by far the biggest buying force in the farmland market.

The Federal Reserve Bank's low-interest policy helps stabilize today's farmland market. In 1980-

81, 18% and 20% interest rates forced thousands of farmers to liquidate farmland. U.S. farmers lost \$224 bil. in asset value during 1982-87, equivalent to ten years of farm supports at recent levels.

During the current U.S. debt-liquidation cycle, the Fed is encouraging low short-term interest rates with its easiest monetary policy in 40 years. Cheap financing has helped keep housing starts rolling. The resulting demand for development land generates cash for exchanges into replacement farmland. Also, easier money makes farmland cheaper to finance.

Non-farm buyers want more land for investment as well as urban uses

Demand for land as an investment, a place to live and a place to build, affects the market value of one acre of farmland in five across America, indicates USDA research.

The first wave of "development" value rolls into the countryside 15 years or more in advance of actual conversion to urban use. That circle of price pressure is felt strongly in at least a 10-mile radius around Midwest towns of 20,000 to 100,000 people.

Beyond this, there's another concentric circle with at least a 20-mile radius from the urban center. This is demand for residential acreages. It's turning abandoned farmsteads into \$250,000 rural villas. In the eastern Corn Belt — which can be considered one huge suburb — auctioneers often carve up an 80-acre farm into eight or nine "farmettes" to attract a wide array of residential and recreational buyers. In such auctions, land for an acreage or hunting land frequently brings more per acre than cropland.

Hunters are paying \$1,500 to \$2,000 per acre for 50%-wooded rolling farms in northeast Iowa. (By the way, we are advertising some of our farm listings in hunting publications!)

Buying country land for hunting and hideaways reaches into the most rural areas. After the Sept. 11 terrorist atrocities, some buyers anxious about biological or nuclear terror have been eager to acquire a rural residence or a remote vacation site.

Altogether, I estimate that demand for "conversion" land is at least 15% of total land demand. That's up from about 10% in USDA surveys 20 years ago.

Farmland now offers safety and earnings which compare favorably with stocks and debt paper. Right now, farmland looks relatively safe compared to traditional paper alternatives like common stock.

There's also some evidence that the long-term investment cycle is turning from paper to "real" things such as silver and gold and land. Silver's recent bottoming action is one such clue.

One savvy land investor in the Midwest buys whole farms, sells the timber to hunters, sells the farmstead to a family that's "longing for the country," and cash-rents the tillable land to a nearby expansion-minded farmer.

The investor's goal: Make enough profit on recreation and

residential parcels to reduce his cost of tillable acres to the point where he can net a 10% or higher rate of return on cash rent. For instance, his final cost of tillable land may be less than \$1,000 per acre on land renting for a net \$100 per year after property taxes.

I'm estimating that nonfarm investors — those buying farmland with intentions of renting it out or custom farming it — bring about \$2 bil. to the farmland market each year.

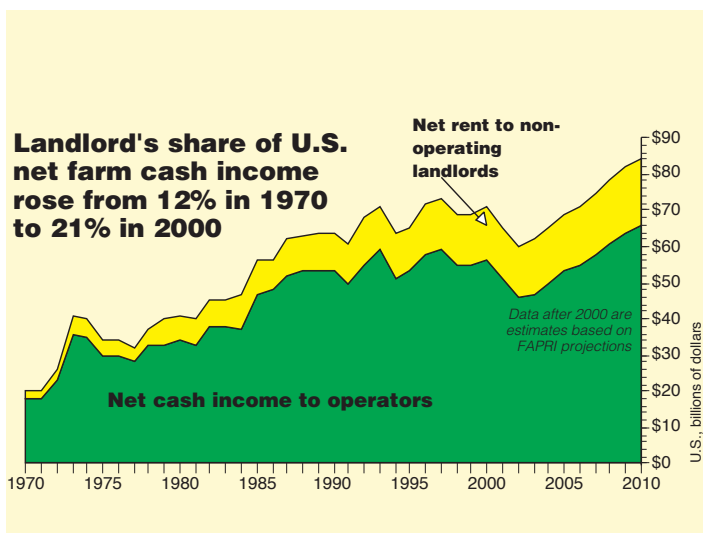
Farmers compete aggressively for cash rental and add-on acres

Farmers still buy about 60% of the U.S. farmland offered on the open market. Exchanges may drive \$3 bil. of those purchases, but another \$5 bil. or so comes from net income of producers who see economies of scale by expanding their farms and ranches.

Today's crop technology enables one operator to handle such large acreages that there's no end in sight to farm consolidation.

A corn-soybean producer with 2,000 crop acres can own a new combine every year for a depreciation cost of \$7 to \$10 per acre. That's a cost advantage of about \$10 per acre over a farmer with only 500 harvest acres. The bigger, more aggressive producers compete first with aggressive cash rents, typically using their AMTA payment to underwrite the rent. A higher rent in turn "justifies" a higher land price in the eyes of the owner. After a few years of this, a renter reasons that even if he has to pay a per-acre purchase price so high that it earns only a 2% or 3% rate of return, at least it ends the relentless war of cash-rent competition.

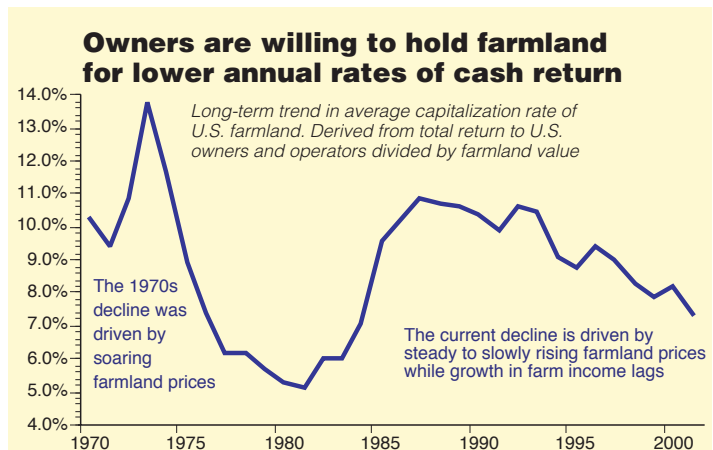
This trend of greater farm operating efficiency and cash-rent competition is helping underwrite stable to strong farmland values. In ag economics, the "return" to land is computed as a residual left over after labor, cash expenses and all other overhead gets paid. Higher efficiency and more intense cash-rent competition now channels 21% of net farm cash income to landowners, up from only 12% in 1970, says USDA. Again, a larger share of the net income pie justifies a higher price per acre.



Landowners are willing to own land for a lower rate of return than 20 or 30 years ago. On prime Illinois land, our appraisers often use a "capitalization rate" of 3% to 4% to help determine market value.

If you apply a capitalization rate of 3.5% and \$130 net cash rent after property taxes, this would point to an appraised price of \$3,714 per acre.

That's close to actual market for prime northeast Illinois farmland in early 2002.



When Keith Collins speaks, we listen. Your Chief USDA Economist has data at this Outlook Conference showing a gradual recovery in cash markets for major ag crops in 2002. Farmers are relying on such forecasts, bidding their eternal optimism into land values.

Actually, we hardly ever have a farmland buyer ask us to find a farm that yields a minimum annual rate of return. In our region of prime farmland, the urge to own land is becoming much more like the European philosophy: The ownership objective is not current cash return, but preserving real buying power for long-term family security through future generations.

As I was winding down this effort to explain what's holding farmland values so firm, I came across the "July 2001 Agricultural Real Estate Market Summary," an analysis by AgriBank, FCB, and its chief appraiser, Ed Dillman. The report includes these supportive reasons for land strength in 2001:

1. Most regions experienced average to above average crop production in 2000.
2. Despite significantly lower prices for most major commodities during the period, real estate values remained stable overall, as government program payments assisted in the shortfall of net income by producers and landowners.
3. Interest rates were competitive for capital purchases.
4. Fewer good-quality farms were available for purchase. There was a strong demand for farmland by farm operators, absentee owners, and investors.
5. Larger operations continued to expand in size by making additional land purchases.
6. Cash rents for cropland remained stable in regions where the supply of farmland for purchase was limited.

7. An increase in demand for rural tract sites of lesser quality land for hobby or smaller, part-time farms. There is an increasing presence of non-farmer owners in rural land markets who are attracted to rural properties due to low interest rates, strong national economy and a desire for rural lifestyle.

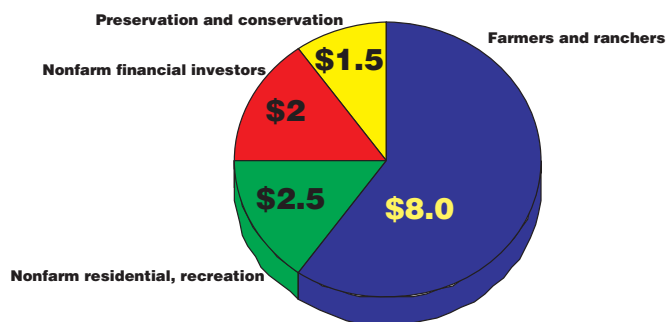
8. Competition for preservation of green space. There is a significant number of new state laws and other private and public funding initiatives for agricultural land preservation, through purchase or donation of conservation easement and purchase of future development rights.

9. Assumption that direct government payments will continue at similar levels of support beyond 2002.

Those points are precisely the same observations I've tried to make from a broker's perspective.

Appraiser Ed Dillman of AgriBank has also noted that AgriBank's loan portfolio for rural homes and smaller part-time farm acreages increased dramatically in 2001.

Estimated sources of today's farmland buying cash
(Billions of dollars expended per year)



I'd like to see USDA analyze the origins of today's farmland buying dollars. We'd probably confirm that net farm income is much less of a farmland market factor than it has been historically.

If the sources of land-buying money flowing into the market looks something like the pie chart above, farmers and ranchers would clearly contribute 60% of the capital. But of the \$8 bil. or so they may be spending, perhaps \$3 bil. to \$4 bil. is actually coming from exchanges or sale of easements rather than net farm income.

A sale of development land applies demand on the land market twice: First in the vicinity of the immediate sale, and second in a different location when the exchanger bids for replacement land. There could be as little as \$4 bil. of farmland spending that depends directly on net farm earnings, and the rest from non-farm investment.

A new National Agricultural Statistics Service publication made available at the Ag Outlook Forum 2002 (AC97-SP-4) shows updated survey data on land acquired or disposed of in 1999. On page 273 of this report, the data indicate that owners disposed of just over 8.9 mil. acres with a market value of \$8.8 bil. in transactions where the new use was for farming or ranching.

Another 1.95 mil. acres was disposed of for non-farm purposes,

having a market value of \$6.95 billion.

The land disposals for both purposes totaled \$15.75 billion. This indicates that 44% of the rural land disposed of in 1999 was for non-farm purposes. This data suggests that nonfarm buyers are bringing slightly more of the total land-buying capital to the marketplace than my crude estimate of about 40%. In years of a healthy nonfarm economy and soft commodity prices, it's reasonable to assume that half of the "farmland market" capital could originate with nonfarm buyers, acquiring land for nonfarm uses which include everything from national parks to parking lots.

I expect Americans to intensify their spending to preserve rural open space. They will spend billions on conservation easements and purchase of rural land.

That "preservationist" buying will compete directly with today's migration of Americans back into the countryside and smaller cities in search of a less congested lifestyle.

And as farmers bid for expansion acres, they will defend their turf against the incoming developers, preservationists and nonfarm investors who just want to own a piece of land.

My major challenge as a land broker: Satisfying all these potential buyers!